In the Claims

Please amend claims 24, 26 and 42 as indicated in the attached Claims Listing. Attached as part of this Response is a Claims Listing as required by 37 C.F.R. § 1.121(d)(1);

Claims Listing:

1-21 Canceled.

22. (Previously Presented) A device for connecting an optical element to a mount of an objective of the type having a housing part, said device comprising:

at least one spring element via which the optical element is coupled to the housing part of the objective; and, at least one connecting member arranged peripherally of the optical element, the optical element being coupled to the mount via the at least one connecting member and a glued connection, the optical element having a mount axis which is inclined at an angle to the direction of a weight force representing the dead weight of at least the optical element, the at least one spring element and the at least one connecting member acting to compensate the weight force to mitigate creeping associated with the glued connection.

23. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device, comprising: connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force, and wherein, in order to compensate the weight force of the optical element, at least one spring element via which the optical element is held on the housing part is provided in addition to the connecting members, and wherein, the optical element is held on the housing part of the objective by the at least one spring element on the side averted from the direction of the weight force.

24. (Currently Amended) The device as claimed in claim 22, [characterized in that] wherein in addition to compensating the dead weight, the at least one spring element is also provided for compensating a tilting error.

25. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device, comprising: connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force, and wherein, in order to compensate the weight force of the optical element, at least one spring element via which the optical element is held on the housing part is provided in addition to the connecting members and wherein, the spring element is biased, the bias corresponding at least approximately to the dead weight of the optical element.

26. (Currently Amended) A device for connecting an optical element to a mount of an objective, said device, comprising: connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force, and wherein, in order to compensate the weight force of the optical element, at least one spring element via which the optical element is held on the housing part is provided in addition to the connecting members, and wherein two [spring] <u>springs</u> are provided that are respectively connected tangentially at their end points to the optical element.

27. (Previously Presented) The device as claimed in claim 26 wherein the end points of the spring elements are connected to the optical element by way of a glued connection.

28. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device, comprising: connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force, and wherein, in order to compensate the weight force of the optical element, at least one spring element via which the optical element is held on the housing part is provided in addition to the connecting members and wherein a central spring element is provided that is connected to a connecting element on which fastening elements that act tangentially on the optical element are arranged.

29. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device, comprising: connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force, and wherein, in order to compensate the weight force of the optical element, at least one spring element via which the optical element is held on the housing part is provided in addition to the connecting members, and wherein the at least one spring element comprises a pneumatic spring element that is connected to the optical element.

30. (Previously Presented) The device as claimed in claim 22 wherein the at least one spring element is arranged on the optical element in a fashion perpendicular to an optical axis of the optical element.

31. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device, comprising:

connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force, and wherein, in order to compensate the weight force of the optical element, at least one spring element via which the optical element is held on the housing part is provided in addition to the connecting members, and wherein the at least one spring element can be adjusted via at least one control element.

32. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device, comprising: connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force, and wherein, in order to compensate the weight force of the optical element, at least one spring element via which the optical element is held on the housing part is provided in addition to the connecting members wherein a number of spring elements are arranged such that an action line of the resulting force runs through a centroid of the optical element.

33. (Previously Presented) The device as claimed in claim 32 wherein an adjusting mechanism is provided by means of which the action line of the resulting force of the spring elements can be displaced to the centroid of the optical element.

34. (Previously Presented) The device as claimed in claim 33 wherein the adjusting mechanism comprises two pairs of spring elements, each spring element acting on the optical element at a distance from the centroid of the optical element, and it being possible to adjust the spring elements individually by the adjusting mechanism.

35. (Previously Presented) A projection objective for semiconductor lithography, the projection objective being of the type having a housing part, the projection objective comprising:

at least one optical element whose position deviates from a vertical axial position; at least one holding element via which the optical element is connected to the housing part; and, connecting members arranged peripherally of the optical element, the optical element being coupled to the mount via the at least one connecting member and a glued connection, the at least one holding element and the at least one connecting member acting to compensate a weight force representing the dead weight of at least the optical element.

36. (Previously Presented) A projection objective for semiconductor lithography comprising:

at least one optical element, the optical element being connected to a mount via connecting members arranged on the circumference of the optical element, and the

position of the optical element deviating from the vertical axial position, and wherein, in order to compensate the dead weight at least of the optical element, at least one holding element via which the optical element is held on a housing part is provided in addition to the connecting members, and wherein the optical element is held on the housing part by the at least one holding element on the side averted from the direction of the weight force.

37. (Previously Presented) A projection objective for semiconductor lithography comprising:

at least one optical element, the optical element being connected to a mount via connecting members arranged on the circumference of the optical element, and the position of the optical element deviating from the vertical axial position, and wherein, in order to compensate the dead weight at least of the optical element, at least one holding element via which the optical element is held on a housing part is provided in addition to the connecting members, and wherein, in addition to being provided for compensating the dead weight, the at least one holding element is also provided for compensating tilting error.

38. (Previously Presented) The projection objective as claimed in claim 35 wherein the at least one holding element comprises a spring element whose spring force producing essentially no change in position of the optical element during creeping of the optical element.

39. (Previously Presented) The projection objective as claimed in claim 37 wherein two spring elements are provided that are respectively connected tangentially at their end points to the optical element.

40. (Previously Presented) A projection objective for semiconductor lithography comprising:

at least one optical element, the optical element being connected to a mount via connecting members arranged on the circumference of the optical element, and the position of the optical element deviating from the vertical axial position, and wherein, in order to compensate the dead weight at least of the optical element, at least one holding element via which the optical element is held on a housing part is provided in addition to the connecting members, and wherein the at least one holding element comprises a pneumatic spring element that is connected to the optical element.

41. (Previously Presented) A projection objective for semiconductor lithography comprising:

at least one optical element, the optical element being connected to a mount via connecting members arranged on the circumference of the optical element, and the position of the optical element deviating from the vertical axial position, and wherein, in order to compensate the dead weight at least of the optical element, at least one holding element via which the optical element is held on a housing part is provided in addition to the connecting members, and wherein, the at least one holding element is arranged on the optical element in a fashion perpendicular to an optical axis of the optical element.

42. (Currently Amended) A device for connecting an optical element to a mount of an objective having a housing part, said device comprising:

an [[the]] optical element; connecting members arranged about the periphery of the optical element, the optical element being connected to the mount via the connecting members and a glued connection, the optical element having a mount axis which is inclined at an angle to the direction of a weight force representing the dead weight of at least the optical element, and wherein, in order to compensate the weight force of the optical element, in addition to the connecting members, the device further comprises at least one holding element via which the optical element is coupled to the housing part of the objective ,the holding element exerting an approximately constant force on the optical element notwithstanding small deflections of the optical element.

43. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device comprising:

connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force of the optical element, and wherein, in order to compensate the weight force of the optical element, the device further comprises, in addition to the connecting members, at least one holding element via which the optical element is held on a housing part of the objective, wherein the force exerted on the optical element by the holding element remains approximately constant in the event of small deflections of the optical element and wherein the optical element is held on the housing part of the objective by the at least one holding element on the side averted from the direction of the weight force.

44. (Previously Presented) The device as claimed in claim 42 wherein, in addition to being provided for compensating the dead weight, the at least one holding element is also provided for compensating a tilting error.

45. (Previously Presented) The device as claimed in claim 42 wherein the at least one holding element comprises at least one spring element whose spring force produces essentially no change in position of the optical element during creeping of the optical element.

46. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device comprising:

connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force of the optical element, and wherein, in order to compensate the weight force of the optical element, the device further comprises, in addition to the connecting members, at least one holding element via which the optical element is held on a housing part of the objective, and wherein the force exerted on the optical element by the holding element remains approximately constant in the event of small deflections of the optical element, and wherein the spring element is biased according to a bias which at least approximately corresponds to the dead weight of the optical element, and wherein the at least one holding element comprises at least one spring element whose spring force produces

essentially no change in position of the optical element during creeping of the optical element.

47. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device comprising: connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force of the optical element, and wherein, in order to compensate the weight force of the optical element, the device further comprises, in addition to the connecting members, at least one holding element via which the optical element is held on a housing part of the objective, and wherein the force exerted on the optical element by the holding element remains approximately constant in the event of small deflections of the optical element, wherein the at least one holding element comprises two spring elements that are respectively connected tangentially at their end points to the optical element, the spring force of the two spring elements producing essentially no change in position of the optical element during creeping of the optical element.

48. (Previously Presented) The device as claimed in claim 47 wherein the end points of the spring elements are connected to the optical element by gluing.

49. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device comprising:

connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force of the optical element, and wherein, in order to compensate the weight force of the optical element, the device further comprises, in addition to the connecting members, at least one holding element via which the optical element is held on a housing part of the objective, and wherein the force exerted on the optical element by the holding element remains approximately constant in the event of small deflections of the optical element, the at least one holding element comprising a spring element whose spring force produces essentially no change in position of the optical element during creeping of the optical element, said spring element comprising a central spring element that is connected to a connecting element on which fastening elements that act tangentially on the optical element are arranged.

50. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device comprising:

connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force of the optical element, and wherein, in order to compensate the weight force of the optical element, the device further comprises, in addition to the connecting members, at least one holding element via which the optical element is held on a housing part of the objective, and wherein the force exerted on the optical element by the holding element remains approximately constant in the event of small deflections of the optical element,

the at least one holding element comprising at least one spring element whose spring force produces essentially no change in position of the optical element during creeping of the optical element, the at least one spring element comprising a pneumatic spring element that is connected to the optical element.

51. (Previously Presented) The device as claimed in claim 42 wherein the at least one holding element is arranged on the optical element in a fashion perpendicular to an optical axis of the optical element.

52. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device comprising:

connecting members arranged on the circumference of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force of the optical element, and wherein, in order to compensate the weight force of the optical element, the device further comprises, in addition to the connecting members, at least one holding element via which the optical element is held on a housing part of the objective, and wherein the force exerted on the optical element by the holding element remains approximately constant in the event of small deflections of the optical element, and wherein the at least one holding element can be adjusted via at least one control element.

53. (Previously Presented) A device for connecting an optical element to a mount of an objective, said device comprising: connecting members arranged on the circumference

of the optical element, the optical element being connected to the mount via the connecting members, the mount axis of the optical element being inclined at an angle to the direction of the weight force of the optical element, and wherein, in order to compensate the weight force of the dead weight of the optical element, the device further comprises, in addition to the connecting members, at least one holding element via which the optical element is held on a housing part of the objective, the force exerted on the optical element by the holding element remaining approximately constant in the event of small deflections of the optical element, and wherein, in addition to being provided for compensating for the dead weight, the at least one holding element is also provided for compensating a tilting error, the at least one holding element comprising a number of holding elements arranged such that an action line of the resulting force runs through a centroid of the optical element.

54. (Previously Presented) The device as claimed in claim 53 further comprising an adjusting mechanism by means of which the action line of the resulting force of the holding elements can be displaced to the centroid of the optical element.

55. (Previously Presented) The device as claimed in claim 54 wherein the adjusting mechanism has two pairs of holding elements, each holding element acting on the optical element at a distance from the centroid of the optical element, and it being possible to adjust the holding elements individually by the adjusting mechanism.